

Abstract Submitted  
for the DPP96 Meeting of  
The American Physical Society

Sorting Category: 4.9.3 (experimental)

**Recirculating Heavy Ion Accelerator Experiment<sup>1</sup>** A. MOLVIK, J. J. BARNARD, M. D. CABLE, D. A. CALLAHAN, V. CIANCIOLO, A. FRIEDMAN, D. P. GROTE, G. W. KAMIN, H. C. KIRBIE, B. G. LOGAN, S. M. LUND, L. A. NATTRASS, M. B. NELSON, T. C. SANGSTER, W. M. SHARP, C. WARD, *LLNL*, T. J. FESSENDEN, D. L. JUDD, *LBNL*, H. S. HOPKINS, *UC Berkeley*, A. G. DEBELING, D. B. LONGINOTTI, *Bechtel Nevada Corporation* — Because of their high efficiency, high repetition rate, and relatively simple target chamber geometry, heavy-ion accelerators are attractive candidates as drivers for inertial fusion power plants. Recirculating induction accelerators have been proposed as potential lower cost alternatives to linear induction machines. The requirement of coordinated and accelerated bending introduces new challenges. A program to develop a small (2.2m radius) scaled recirculator at LLNL is underway. The 80 kV ion source, electric quadrupole matching section, and a short linear magnetic quadrupole transport section have been characterized. We are currently assembling the initial bend section and will present measurements of the space charge dominated beam phase space. An overall experimental program description will also be given.

<sup>1</sup>Work performed under the auspices of U.S. DOE by LLNL Contract W-7405-ENG-48 and by LBL Contract DE-AC03-76SF00098.

☒ Prefer Oral Session  
☐ Prefer Poster Session

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Date submitted: July 11, 1996

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